IT PROJECT EVALUATION

Project Tracking No.: E-021-FY03-Ed.

Return on Investment Program Funding Application (FY 2003 Request)

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

SECTION I: PROPOSAL

Date: 7/18/2001

Agency Name: Division of Vocational Rehabilitation Services

Project Name: Computer Hardware Replacement Cycle

Expenditure Name:

Agency Manager: Steve Nicoll

Agency Manager Phone Number / E-mail: 281-4141 / snicoll@dvrs.state.ia.us

Executive Sponsor (Agency Director or Designee): Dwight Carlson, Division Administrator

Request For ROI Application Waiver:

Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation:

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this project or expenditure required by State statute? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Does this project or expenditure meet a health, safety or security requirement?
☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this a "research and development" project or expenditure? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) and a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:

Pre-Project: Supervisors and counselors in the field offices have been reliant on secretarial staff to use computers to enter much of the caseload information collected manually by counselors at the time the client was initially setup to receive services. Several of the counselors and supervisors don't use computers to monitor caseloads and office budgets. Reasons for this vary, but are mostly due to limited computer skills and the minimal amount of computer usage required for the counselors and supervisors to perform their jobs.

Post-Project: Even though the depreciation cycle that DVRS is implementing isn't directly related to the Iowa Rehabilitation Services System (IRSS) process redesign project, ongoing replacement of computer hardware is a contributing factor to the ongoing success of the project. Since the IRSS project is being designed to streamline the process of managing caseloads and budgets, both counselors and supervisors will also need to become more reliant on computers to be more efficient at performing their job responsibilities.

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response:
Through the development of comprehensive testing and training plans, DVRS counselors and supervisors will become more skilled and more aware of the benefits computers contribute towards improving traditional business processes. As a result, computers will have a direct, positive impact on how staff manage their workloads. Maintaining an inventory of stable and dependable computer hardware that meets the daily needs of our users will be critical as DVRS redesigns their business process to ultimately improve service delivery to all clients.

Our current hardware inventory has been fairly stable over the course of the past two years. Whenever hardware failure does occurs in the field offices, staff either ship the hardware or bring it directly to Central Office DVRS Help Desk for service. Not only is this an inconvenience for the worker but also is expensive to transport the equipment to Central Office and back to the field office. Included with computer equipment replacement is an onsite service agreement that will eliminate the time and expense involved in shipping and transporting computer equipment for repair.

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

Response: Stakeholders are all internal users who have access to DVRS desktop computers, monitors, and servers.

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1. Project Executive Sponsor Responsibilities: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Response: No response required.

2. Organization Skills:
   a. List the project management skills necessary for successful project implementation
   b. List the project management skills available within the agency
   c. List the source(s) of project management skills lacking within the agency
   d. Summarize relevant agency project management experience and results

Response: Not applicable

B. Project Information

1. History:
   a. Is this project the first part of a future, larger project? If so, please explain.
   b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

Response:
In January of 1999, the existing network for DVRS was approximately four to five years old. Servers, desktops, and monitors were becoming unstable and required additional staff time and expense to support the outdated equipment. Hardware components were failing almost daily, making the network unreliable and time-consuming to support.

The hardware DVRS was using did not meet state standards nor were we compatible with other state agencies. In addition, much of the hardware was not compatible with the Y2K conversion. As a result, DVRS invested over $750,000 to upgrade a majority of the hardware and software.

2. Expectations: Describe the primary purpose or reason for the project.

Response:
Staff reliance on technology and trust in performance of computer hardware are the primary reasons for establishing a depreciation cycle. In addition, current computer inventory is becoming outdated, warranties are expiring, and hardware is becoming expensive to maintain by DVRS Information Services staff.

DVRS wants to remain compliant with all ITD established Enterprise Standards (S-TA-001-001) for procurement of computer hardware.

3. Measures: Describe the criteria that will be used to determine if the project is successful.

Response:
Customer satisfaction associated with minimal downtime due to hardware failure.
Reduction in the amount of time and costs associated with maintaining computer hardware.
Improvements in hardware performance due to continual advancements in computer technology.
Fast turnaround to replace computer hardware due to equipment failure.

4. Environment: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

Response:
Purchasing of desktops, laptops, monitors, and servers is specific to the needs of DVRS staff.

5. Risk: Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

Response:
DVRS is currently in the Detail Design Phase of the Iowa Rehabilitation Services System (IRSS) redesign project. Because the IRSS system will provide users with added functionality and improvements in serving our clients, much of what is performed manually will become fully automated. As a result, the reduction of paper flow caused by an increased reliance towards automation will enable DVRS to serve our clients more effectively and efficiently.

With the increased reliance on technology in DVRS due to the IRSS project, the risks of not upgrading computer hardware on a cyclical basis will have a negative effect towards improving our business process and the ways we deliver services to our clients.

With the IRSS system and the demands placed on new technology, staff are aware that the new system will require change in business process and job responsibility. It is extremely important that staff realize change in technology will help improve and not jeopardize their needed improvements in business process.

6. Security / Data Integrity / Data Accuracy / Information Privacy
   a. List the security requirements of the project
   b. Describe how the security requirements will be integrated into the project and tested
   c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

Response: Not applicable

7. Project Schedule
   Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

Response:
Each fiscal year, DVRS plans to replace 1/3 of all computer hardware. This established depreciation cycle for all computer hardware includies desktop computers, laptop computers, monitors, and servers. Approximate timeframe for purchasing will occur during the month of July each fiscal year.

SECTION III: TECHNOLOGY (In written detail, describe the following)

A. Current Technology Environment

1. Software (Client Side / Server Side / Midrange / Mainframe):
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external

Response:

Software - Mainframe

a. Application Software:
The case management and financial management applications use VSAM data files with CICS as the front-end component.

b. Operating System Software:
All case management and financial management applications are maintained and managed on the State's IBM OS/390 Mainframe.

c. System Interfaces:
DVRS applications interfaces with the Disabilities Determination Services (DDS) applications. DDS is a separate bureau within DVRS that is under the control of the Social Security Administration. Client and claim information is captured and merged within a VSAM file in the DVRS financial application. A warrant file is then generated and passed to the Iowa Financial Accounting System (IFAS) in the Department of Revenue for the purpose of creating warrants.

Software - Client/Server

a. Application Software:
The following software is the standard package provided to all DVRS desktop computer users:
Microsoft Office
Blues 3270 Emulator
Norton Antivirus
Microsoft Exchange
Internet Explorer 5.0
Win-Zip
DiskKeeper
Netscape Navigator 4.0
Mainframe-based CICS and batch applications

b. Operating System Software:
Windows NT 4.0 Workstation
Windows NT 4.0 Server

c. System Interfaces: None

2. Hardware (Client Side / Server Side / Mid-range / Mainframe):
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external

Response:
a. Platform, operating system
Windows NT 4.0

b. Storage and physical environment:
Compaq Proliant Servers - 486, Pentium, Pentium II
Wild Rose Pentium and Pentium II Workstations

c. Connectivity and bandwidth:
Ethernet to the Iowa Communications Network (ICN)
Microsoft Remote Access Services (RAS) server for staff requiring dial-in access to the network

d. Logical and physical connectivity:
T-1 from central office to the 11 Area Offices
56k from the Area Offices to the Service Units

e. System Interfaces:
Disabilities Determination Services
Iowa Financial Accounting System - Dept. of Revenue and Finance

B. Proposed Technology Environment

1. Software (Client Side / Server side / Mid-range / Mainframe)
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external
   d. General parameters if specific parameters are unknown or to be determined

Response:
a. Application software:
Vocational Rehabilitation Technical Staff are in the process of researching two separate solutions for the development of the IRSS web-based application. Each approach to developing the application would provide a long-term (minimum 5+ year) solution.

b. Operating system:
Windows 2000 server and desktop

c. Major interfaces:
With the IRSS application, the interfaces with Disabilities Determination Services and the Dept. of Revenue and Finance (IFAS) will need to be built into the system for the purpose of sharing financial data.

d. General pearameters:
Use Microsoft's .NET framework, developing in the user interface in Visual Basic and Activer Server Pages (ASP), connecting to a Microsoft SQL 2000 database.

2. Hardware (Client Side / Server Side / Mid-range / Mainframe)
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and Bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external
   f. General parameters if specific parameters are unknown or to be determined

Response:
a. Platform, operating system:
Windows 2000 desktop & server

b. Storage and physical environment:
Microsoft SQL Server 2000 - Application database environment
NCR Teradata (ITD) - Data Warehouse database environment

c. Connectivity and Bandwidth:
Ethernet to the Iowa Communications Network (ICN)

d. Logical and physical connectivity:
T-1 from central office to the 11 Area Offices
56k from the Area Offices to the Service Units (upgrades to a portion of the Service Units is under consideration)

e. With the IRSS application, the interfaces with Disabilities Determination Services and the Dept. of Revenue and Finance (IFAS) will need to be built into the system.

f. General parameters:
In general, hardware requirements will include a test server, development server, and production server. In addition, development workstations will be necessary for the application development and implementation phase of the project.

Workstation:
Dell GX150 Desktop with Intel Pentium III Processor 1.0 MHz
Dell P780 17" monitor

Servers:
Compaq ProLiant ML530

C. Data Elements

If the project creates a new database, provide a description of the data elements.

Response: Not Applicable

SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right)\times \%\ State\ Share\right]+\left(Annual\ Ongoing\ Cost\times \%\ State\ Share\right)=Annual\ \text{Pr}orated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$	1	%	$	%	$

Software	$	4	%	$	%	$
Hardware	$241795	3	21%	$241795	21%	$67703
Training	$	4	%	$	%	$
Facilities	$	1	%	$	%	$
Professional Services	$	4	%	$	%	$
ITD Services	$	4	%	$	%	$
Supplies, Maint, etc.	$	1	%	$	%	$
Other (Specify)	$	1	%	$	%	$
Totals	$241795	-------	-------	$241795	------	$67703

Transfer this amount to the ROI Financial Worksheet, item “D” on page 15.

B. Funding: Enter data or provide response as requested

1. This is (pick one):
   - ☐ A Pooled Technology Fund or Reengineering Fund Request
   - ☒ An Agency IT Expenditure or Budget Request (General Fund, Road Funds, etc)
   - ☐ Other – Specify:

2. On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$50777	21%	$50777	21%	$50777	21%
Pooled Tech. Fund	$	%	$	%	$	%
Federal Funds	$191018	79%	$191018	79%	$191018	79%
Local Gov. Funds	$	%	$	%	$	%
Grant or Private Funds	$	%	$	%	$	%
Other Funds (Specify)	$	%	$	%	$	%
Total Project Cost	$241795	100%	$241795	100%	$241795	100%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

Response:

1. On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would be absorbed by your agency from normal operating budgets (all funding sources)?

Response:
Normal operating budgets for DVRS are comprised of 21.3% state general funds and other funds, and 78.7% federal funds from the U.S. Department of Education, Rehabilitation Services Administration (RSA).

2. Identify, list, and quantify all new annual ongoing (maintenance, staffing, etc.) related costs (State $s) that will be incurred after implementation or expenditure.

Response:
The projected new annual ongoing cost associated with replacing 1/3 of DVRS computer hardware is $241,795. This projection is based on current hardware costs at the time the ROI document was prepared. Future organizational needs and fluctuation in hardware costs limits the accuracy of projecting expected ongoing costs.

C. ROI Financial Worksheet: Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:

1. Annual Pre-Project Cost – Quantify all actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation.

Response: Not applicable

2. Annual Post-Project Cost – Quantify all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: Not applicable

3. State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: Not applicable

4. Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time savings and $.325 per mile for travel cost savings.

Response: Not applicable

5. Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:
Approximately, 40 hours of DVRS Help Desk staff time per month is spent on diagnosing problems with desktops and servers. In addition, there is a cost associated with the users when they have to do their work without a desktop computer.

Diagnosis and correcting hardware problems is done centrally. This means desktop computers in the field offices that experience hardware failure must be sent to DVRS Central Office Help Desk for repair. On average, 6-8 desktop computers are received from field offices per month with an approximate turnaround time of 5 days for repair.

Warranties for all DVRS servers are set to expire by the end of fiscal year 2002. This could result in a major expense due to the fact that the server inventory will be over three years old. Based on FY2001, the repairs covered under warranty cost approximately $2,400. Due to the age of the current server inventory and the expiration of existing warranties, this cost is anticipated to increase as higher demands are placed on outdated technology. At a minimum, server repair costs are project to be $23,360 for DVRS during FY 2003 based on the existing servers.

The estimated expense incurred to maintain computer hardware and the loss of staff productivity time is approximately $94,592 per year. A majority, if not all, of this expense could be avoided with the ongoing procurement of new equipment and an onsite support agreement from the computer manufacturer. Not procuring new hardware on a regular basis will result in higher costs to support old technology. As a result, a decrease will occur in the annual benefit from not only a cost perspective but from a user productivity perspective.

6. Total Annual Project Benefit -- Add the values of all annual benefit categories.

Response: $71,232 – Maintain outdated desktop computer hardware and loss of staff productivity
$23,360 – Maintain outdated servers and loss of staff productivity
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$94,592 – Total Annual Project Benefit

7. Total Annual Prorated Cost – It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related. Completing Section IV-A, Project Budget of the evaluation document will provide all the necessary information for this item.

Response: $67,703

8. Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

Response: $94,592 / $67,703 = 1.40

9. ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

Response: $94,592 – $67,703 / ($241,795 * 21%) = .53%

10. Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

Response:
There will be a decrease in the time spend diagnosing and correcting hardware failures due to the ongoing replacement of computer inventory. In addition, an onsite service agreement by the computer manufacturer will apply to all field office locations.
Importance Factor 10

With the increasing demands placed on staff to utilize computers due to business process redesign, maintaining an inventory of reliable computer hardware will improve staff confidence in computer usage and increase productivity in managing cases, budgets, contracts, vendors, and clients.
Importance Factor 10

New technology will reduce the frustration factor of counselors and supervisors who are uncomfortable using a desktop computer to help manage many of their job functions. Providing customized training to staff with limited computer skills can minimize much of their frustration. Using new technology is importance because it enables users to maintain a sense of reliability and an awareness of how computers can improve job performance.
Importance Factor 10

Replacement of computer equipment will enable staff to become more productive with newer and faster technology.
Importance Factor 10

Reduction in the amount of time and hassle to deliver desktop computers, requiring service, to Central Office from remote Field Office locations.
Importance Factor 10

11. ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
A. Total Annual Pre-Project Cost:	$
Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
B. Total Annual Post-Project Cost:	$
State Government Benefit (= A-B):	$
Annual Benefit Summary	
State Government Benefit:	$
Citizen Benefit:	$
Opportunity Value or Risk/Loss Avoidance Benefit:	$
C. Total Annual Project Benefit:	$94,592
D. Annual Prorated Cost (SECTION IV-A):	$67,703
Benefit / Cost Ratio: (C / D) =	1.40
Return On Investment (ROI): (C – D) / Requested Project Funds) x 100 =	.53%
☐ **Benefits Not Readily Quantifiable**	

Section V: ITC Project Evaluation Criteria

Criteria and Location in Project Evaluation Document		Points
1.	Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2.	Will the project improve customer service? **Location: Section I-B.2**	**15**
3.	Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4.	Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5.	Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6.	Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7.	Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy? **Location: Section II-B1, IVB2**	**10**
8.	Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9.	Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10.	What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
	Total	**100**